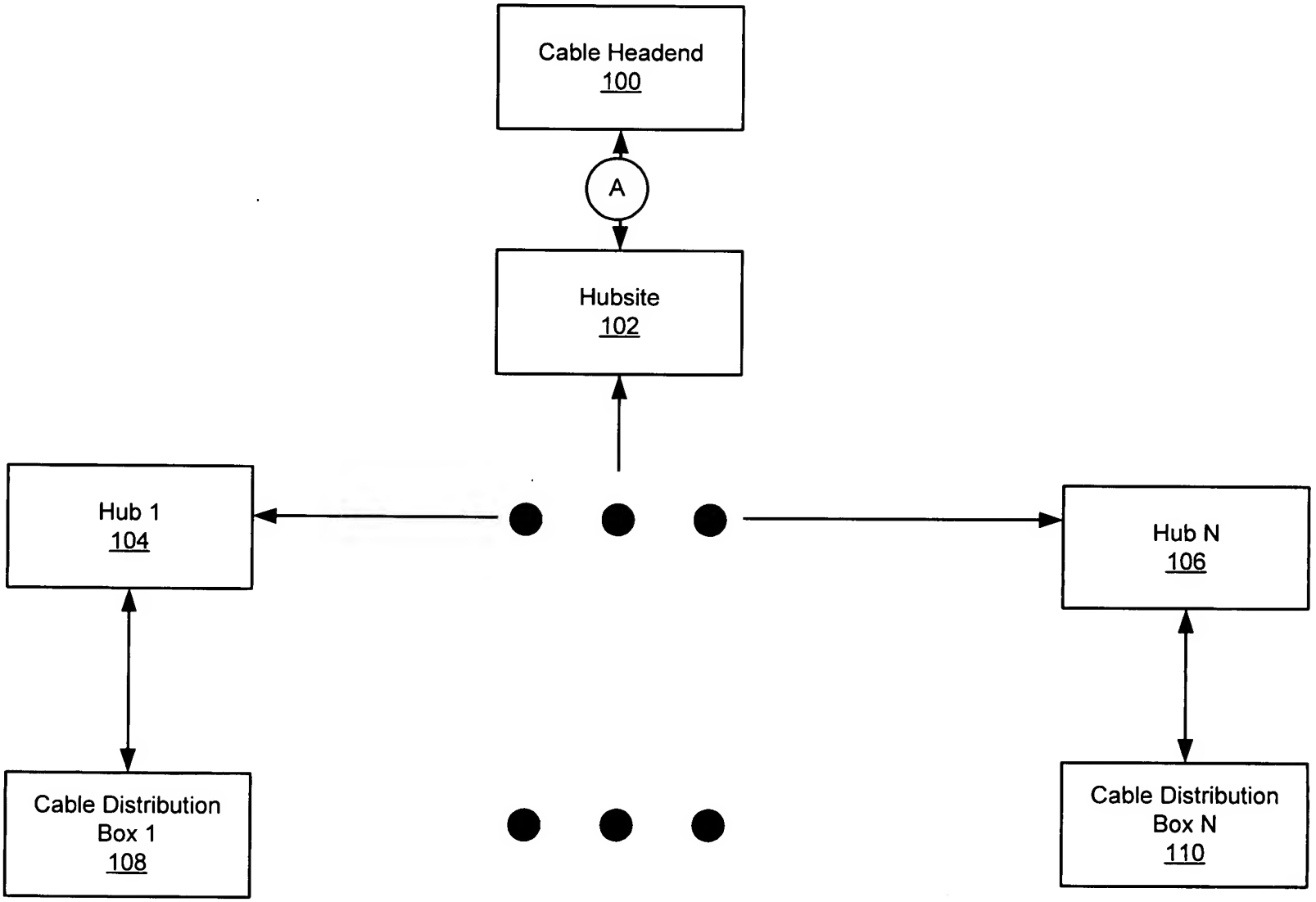

FIGURE 1
(PRIOR ART)

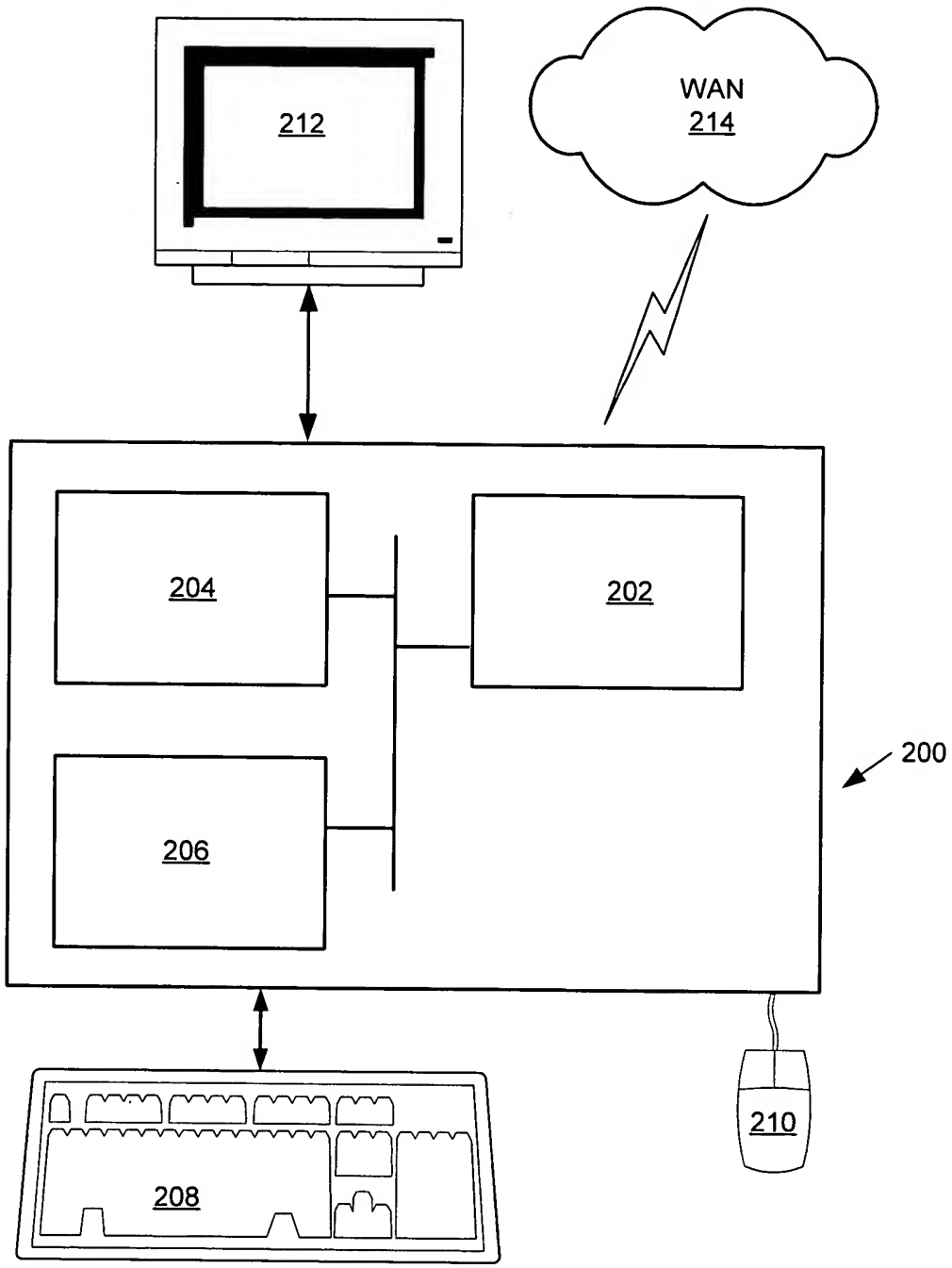

FIGURE 2
(PRIOR ART)

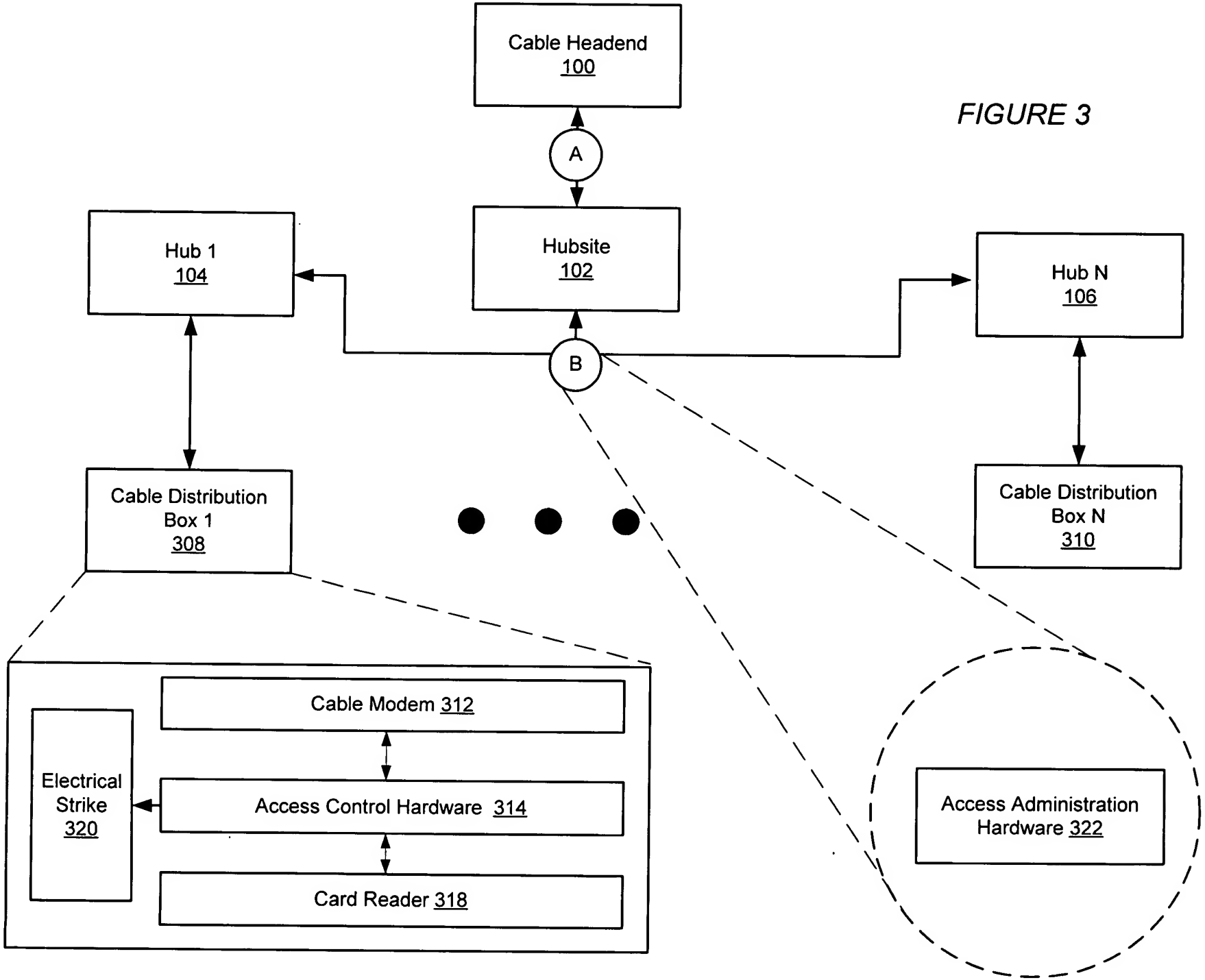
Cable Headend
100
A
Hub 1
104
Hubsite
102
Hub N
106
B
Cable Distribution
Box 1
308
Cable Distribution
Box N
310
Cable Modem 312
Electrical
Strike
320
Access Control Hardware 314
Card Reader 318
Access Administration
Hardware 322

FIGURE 3

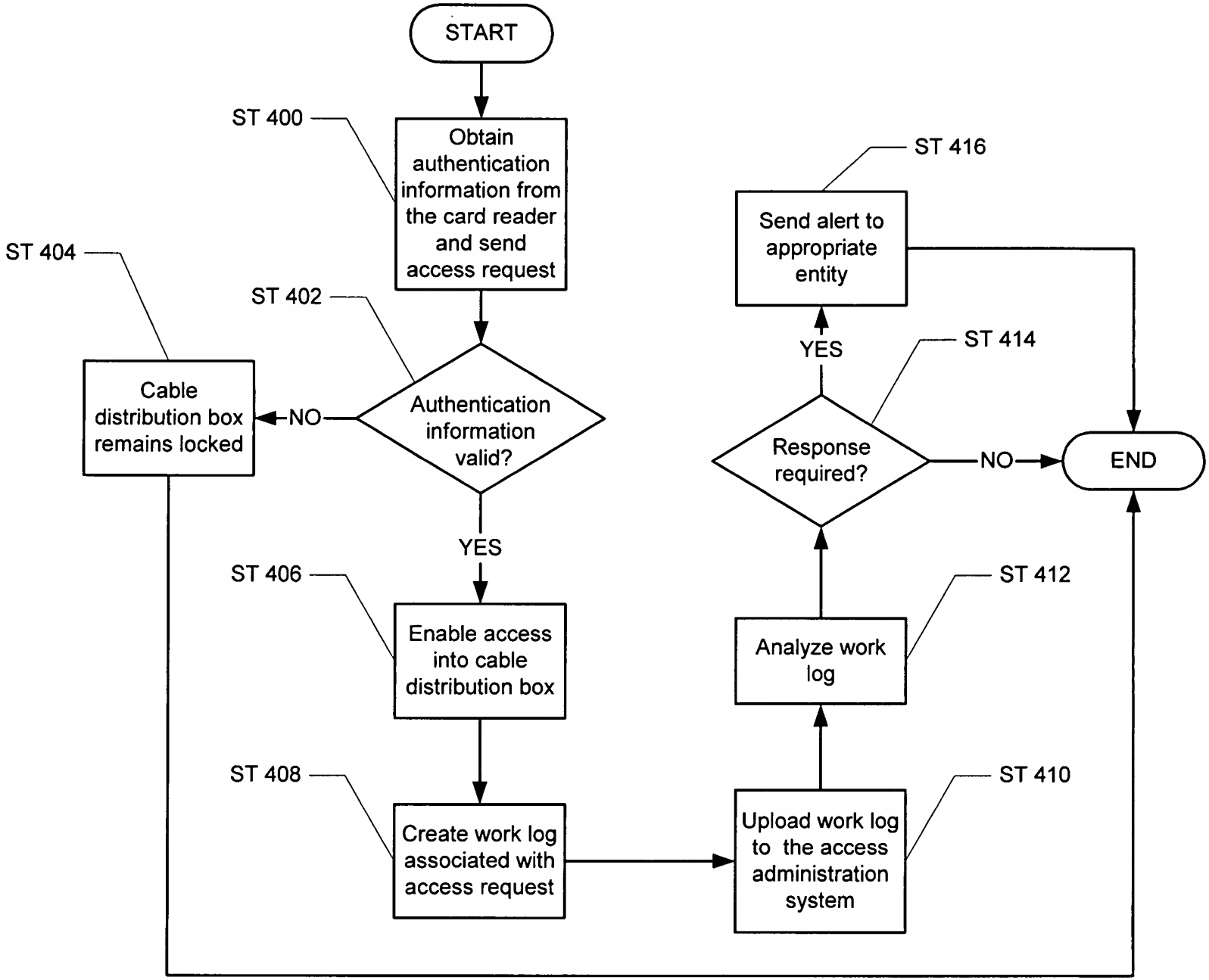
START
ST 400
Obtain authentication information from the card reader and send access request
ST 402
Authentication information valid?
NO
ST 404
Cable distribution box remains locked
YES
ST 406
Enable access into cable distribution box
ST 408
Create work log associated with access request
ST 410
Upload work log to the access administration system
ST 412
Analyze work log
ST 414
Response required?
NO
END
YES
ST 416
Send alert to appropriate entity

FIGURE 4

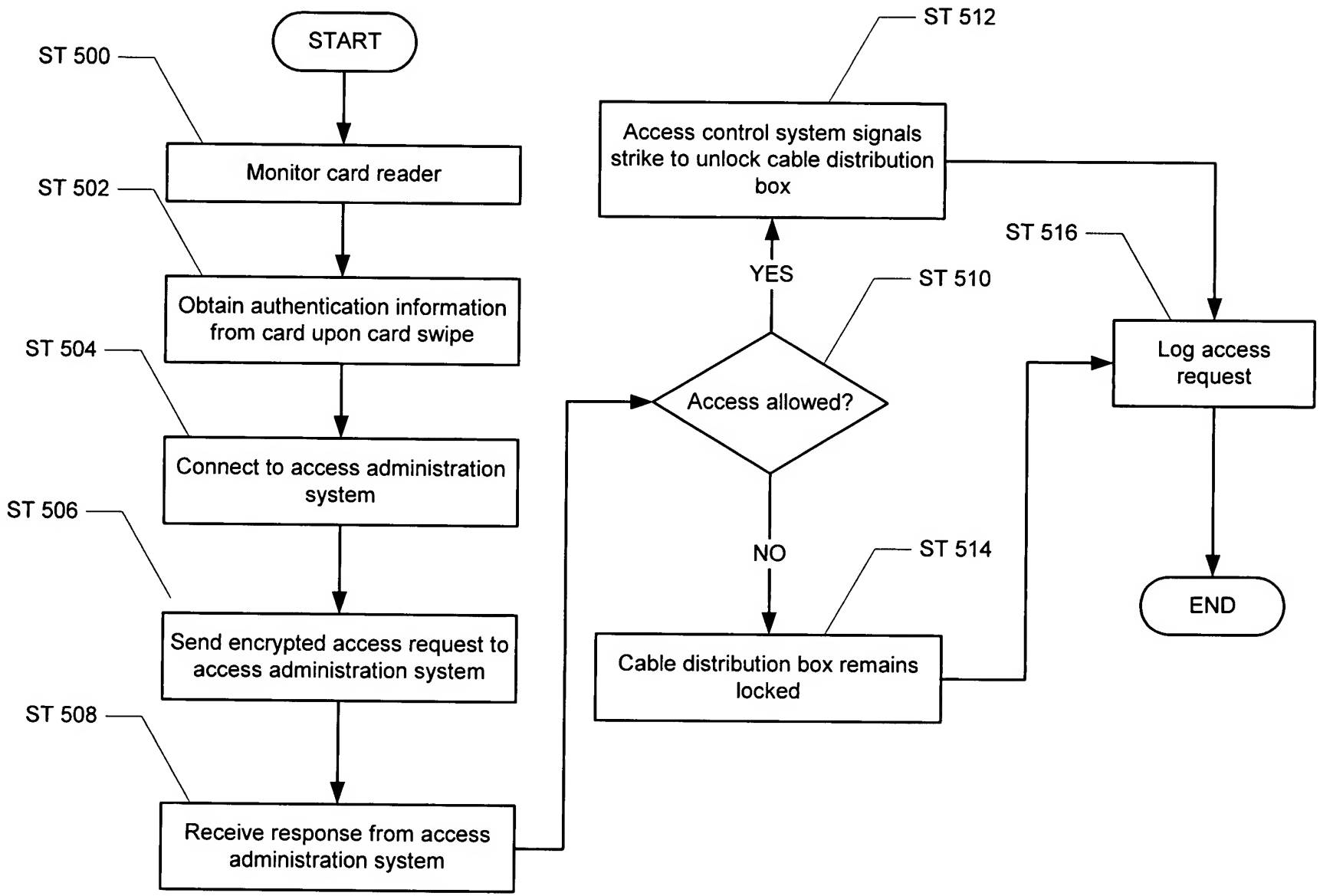
START
ST 500
Monitor card reader
ST 502
Obtain authentication information from card upon card swipe
ST 504
Connect to access administration system
ST 506
Send encrypted access request to access administration system
ST 508
Receive response from access administration system
Access allowed?
ST 510
YES
NO
ST 512
Access control system signals strike to unlock cable distribution box
Cable distribution box remains locked
ST 514
ST 516
Log access request
END

FIGURE 5

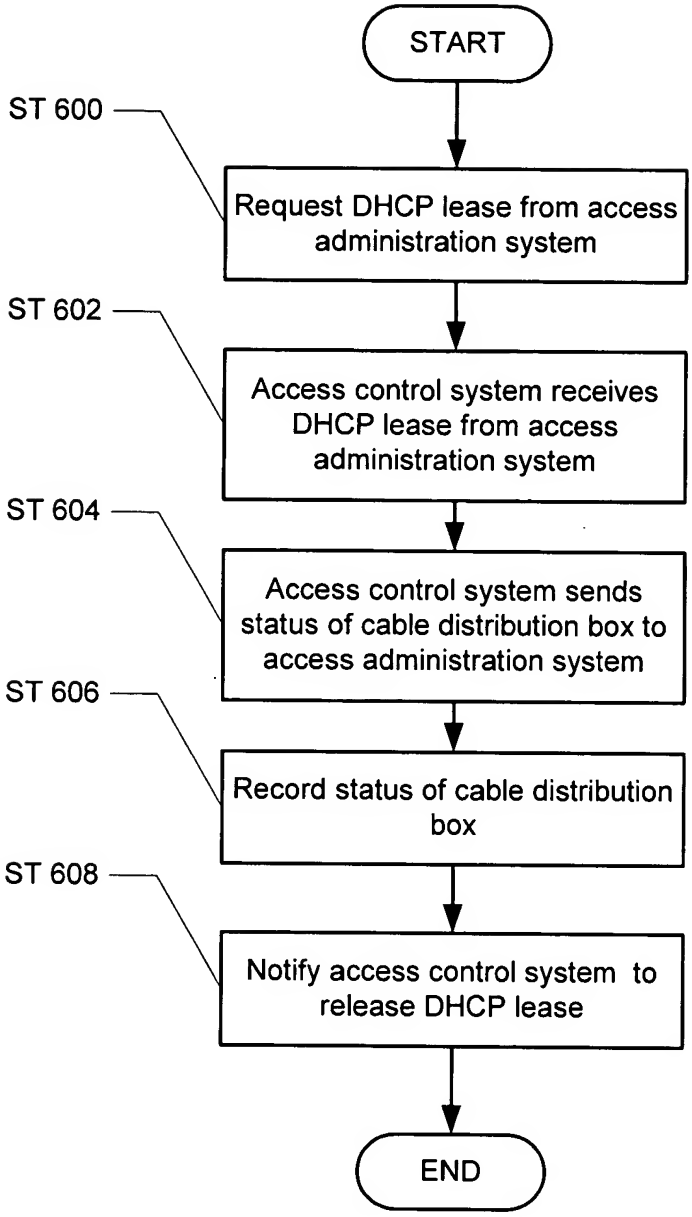
START
ST 600
Request DHCP lease from access administration system
ST 602
Access control system receives DHCP lease from access administration system
ST 604
Access control system sends status of cable distribution box to access administration system
ST 606
Record status of cable distribution box
ST 608
Notify access control system to release DHCP lease
END

FIGURE 6

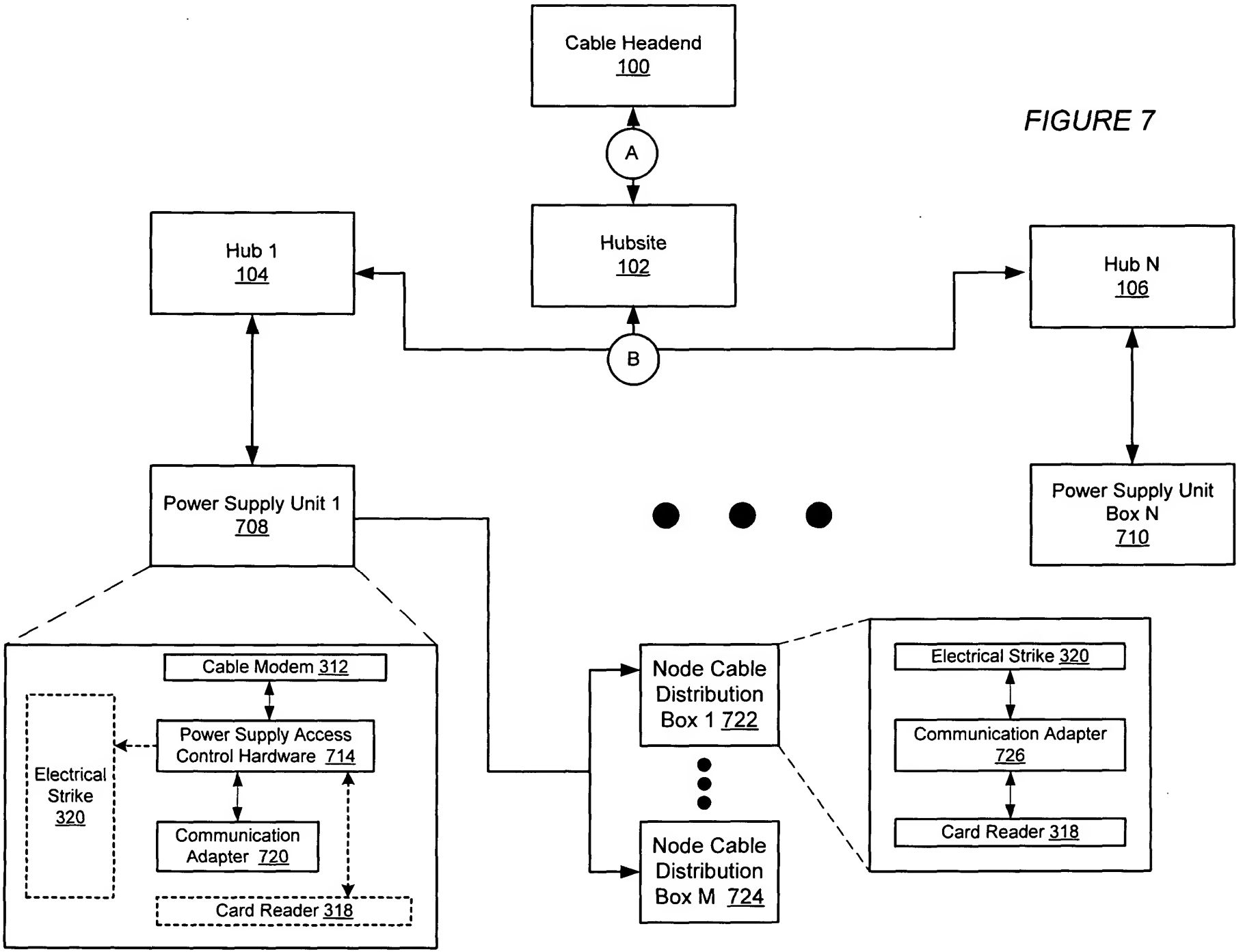
Cable Headend
100
A
Hubsite
102
B
Hub 1
104
Hub N
106
Power Supply Unit 1
708
Power Supply Unit
Box N
710
Cable Modem 312
Power Supply Access
Control Hardware 714
Electrical
Strike
320
Communication
Adapter 720
Card Reader 318
Node Cable
Distribution
Box 1 722
Node Cable
Distribution
Box M 724
Electrical Strike 320
Communication Adapter
726
Card Reader 318

FIGURE 7